REVISED 06/08

LSUE COURSE SYLLABUS

I. Environmental Studies 1000 Instructor: Biology Faculty

II. Course description from the current LSUE catalog:

Environment and Technology: Perspective in Environmental Problems. Lec. 3; Cr. 3.

Environmental quality problems involving water, air and land; analysis of the interrelationships and nature of ecological stresses; society's response to such problems.

III. Textbook(s) and other required materials:

<u>Environmental Science: A Study of Interrelationships</u>, 11th ed., Eldon Enger and Bradley F. Smith (McGraw-Hill Companies).

IV. Evaluation/grading (policy and basis; number and frequency of tests and papers; weights of particular tests or papers; etc.):

Four examinations will be administered:

Test I = 100%,

Test II (Midterm) = 100%.

Test III = 100%. and

Test IV (Final) = 100%.

Grading scale will be provided by the instructor.

V. Policies pertaining to attendance, late work, make-up work, etc.:

All students are required to attend class on a regular basis. If a student misses an exam or quiz, he must contact his/her instructor as soon as possible to make arrangements for a possible make-up.

VI. Course objectives:

- A. Provide student with a foundation to understand why environmental problems are complex and interrelated.
- B. Survey various ecosystems and communities
- C. Explore the impact of human society on the environment.
- D. Provide an introductory survey of environmental policy and the whole decision making process.

VII. Major instructional objectives:

- A. To encourage students to become aware of current issues in environmental science.
- B. Facilitate the understanding of environmental interrelationships.
- C. To impart knowledge of the human impact on natural resources and ecosystems
- D. Explore possible solutions to the environmental issues facing society.

VIII. Brief summary of course content by major units of instruction:

- A. Introduction
 - 1. History of Environmental Science
 - 2. Environmental Interrelationships
- B. Environmental Ethics and Risks
 - 1. Environmental attitudes
 - 2. Case-studies
 - 3. Corporate Environmental Ethics
 - 4. Individual Environmental Ethics
 - Global Environmental Ethics

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- C. Interrelated Scientific Principles
 - 1. Structure of Matter
 - 2. Energy Principles
- D. Interactions: Environment and Organisms
 - 1. Ecological Concepts
 - 2. Natural Selection and Evolution
 - 3. Organismal Interactions
 - 4. Community & Ecosystem Interactions
- E. Kinds of Ecosystems and Communities
 - 1. Succession
 - 2. Biomes
 - 3. Major Aquatic Ecosystems
- F. Human Impact in Resources and Ecosystems
 - 1. Renewable and None Renewable Resources
 - 2. Wilderness Areas
 - 3. Forest Management Practices
 - 4. Modified aquatic Ecosystems
 - 5. Natural Selection and Extinction
- G. Population Characteristics and Issues
 - 1. Population Growth
 - 2. Environmental Implications
- H. Energy and Civilization: Patterns of Consumption
 - 1. History of Energy Consumption
 - 2. Energy and Economics
 - 3. Usage
 - 4. Consumption Trends
- I. Energy Sources
 - 1. Sources of Energy
 - 2. Nonrenewable Sources of Energy: Fossil Fuels
 - 3. Renewable Sources of Energy
- J. Nuclear Energy: Solution or Problem?
 - 1. Nuclear Fuel Cycle
 - 2. Nuclear Power Concerns
- K. Biodiversity Issues
 - 1. Benefits from Biodiversity
 - 2. Threats on Biodiversity
 - 3. Biodiversity Management and Protection
- L. Land-Use Planning
 - 1. Historical Land Use and Development of Cities
 - 2. Problems associated w/Unplanned Urban Growth
 - 3. Conflicts over Recreational Land Use
 - 4. Land Use Planning
- M. Soil and Its Uses
 - 1. Soil Formation and Properties
 - 2. Soil Conservation Practice
- N. Agricultural Methods and Pest Management
 - 1. Differing Agricultural Methods
 - 2. Impact of Fertilizer
 - 3. Pesticides
 - 4. Organic Forming & Integrated Pest Management
- O. Water Management
 - 1. Hydrologic Cycle
 - 2. Kinds of Water Use
 - 3. Kinds and Sources of Water Pollution
 - 4. Water-Use Planning Issues
- P. Air Quality Issues

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- 1. Atmosphere
- 2. Primary Air Pollutants
- 3. Control of Air Pollution
- Q. Solid Waste Management and Disposal
 - Methods of Waste Disposal
 - 2. Associated Problems
- R. Hazardous and Toxic Wastes
 - 1. Define Hazardous Waste
 - 2. Associated Environmental Problems
 - 3. Health Risks
 - 4. Various Management Techniques
- S. Environmental Policy and Decision Making
 - 1. Development of Environmental Policy
 - 2. International Environmental Policy
 - 3. Risk and Cost

IX. Methods of instruction:

- A. Lectures, the chief method.
- B. Audiovisuals
- C. Charts
- D. Demonstrations

X. Brief overview of special instructions:

Students may seek tutorial assistance at the Tutorial Center as well as from their instructor.

XI. Bibliography of supplemental references and/or source materials:

EPA: Guide to Environmental Issues

Environmental Science by Cunningham and Saigo. (McGraw Hill Companies).

Louisiana Environmental Professionals

ADS (Americans with Disabilities Act) Statement

Any student who is a "qualified individual with a disability" as defined by Section 504 of the Rehabilitation Act and Title II of the ADA, and who will need accommodated services (e.g., note takers, extended test time, audiotape, tutorials, etc.) for this course must register and request services through the Office of Academic Assistance Programs, S-150.

CSD | CODE OF STUDENT CONDUCT

LSUE enforces discipline on campus to protect the academic environment of the campus and the health and safety of all members of the University community. To accomplish this objective, the University enforces standards of conduct for its students. Students who violate these standards can be denied membership in the LSUE community through imposition of disciplinary sanctions.

The LSUE Code of Student Conduct can be found on the LSUE website (Isue.edu). Follow the "Current Students" link from the homepage, and then click on "Student Handbook."